

Massage carriage

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Claims

1. Massage carriage for use in a massage chair or similar
10 that can be moved back and forth along a frame in the
massage chair or similar, comprising a drive (1) that
contains at least one motor (2) and gearing parts, a first
15 shaft (6) that can be moved by the drive (1) and a second
shaft (7) that can be moved by the drive (1), two first
arms (18, 19), which are connected to the first shaft (6),
can be moved by the first shaft (6) and on each of which a
massage element (20, 21) is mounted, and two second arms
20 (24, 25), which are connected to the second shaft (7) and
can be moved by the second shaft (7), one of which each
acts on one of the first arms (18, 19), such that the
massage elements (20, 21) can be moved by the drive (1)
25 with one movement component oriented parallel to the frame
and one oriented perpendicular to the frame, where the
drive (1) displays a single motor (2) with a motor shaft
(3), characterized in that the motor
shaft (3) displays two shaft sections (8, 9), arranged on
opposite face ends of the motor (2) and lying on one axis,
where the first shaft (6) can be moved by means of the one
30 shaft section (8) via a reduction gear (4), and the second
shaft (7) by means of the other shaft section (9) via a
reduction gear (5).

2. Massage carriage according to Claim 1, characterized in that the shaft sections (8, 9) are
35 sections of a continuous motor shaft (3).

3. Massage carriage according to Claim 1 or 2, characterized in that the reduction gear (5) via which the second shaft (7) can be moved displays a free-wheel device (10) in a particular sense of rotation of the motor shaft.

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4. Massage carriage according to Claim 1, characterized in that one of the shaft sections (9) can be permanently driven by the motor (2), and the other shaft section (8) can be disconnected from the motor (2) by means of a clutch (11).

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5. Massage carriage according to Claim 4, characterized in that the clutch (11) is an electromagnetic clutch.

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6. Massage carriage according to Claim 4 or 5, characterized in that the clutch (11) displays an automatic brake, by means of which the disconnectable shaft section (8) can be braked or blocked in disconnected state.

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7. Massage carriage according to Claim 6, characterized in that the disconnectable shaft section (8) can be braked or blocked by an integrated spring mechanism.

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8. Massage carriage according to one of Claims 4 to 7, characterized in that the reduction gear (5) via which the second shaft (7) can be moved displays a free-wheel device (10) in a particular sense of rotation of the shaft section (9) that can be permanently driven by the motor (2).

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9. Massage carriage according to one of Claims 1 to 8, characterized in that the drive (1) displays a housing comprising two shells (26, 27) for the motor (2) and the gearing parts.

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10. Massage carriage according to Claim 9, characterized in that the bearing arrangement for the motor (2) and the gearing parts is integrated in the housing in one piece.

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11. Massage carriage according to Claim 10, characterized in that the housing shells (26, 27) and the bearing arrangement for the motor (2) and the gearing parts are made of plastic, injection-molded in one piece.

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12. Massage carriage according to one of Claims 9 to 11, characterized in that one part (31) of a nut is integrally molded on the housing and interacts with the spindle (30) of a linear drive unit located on the frame for moving the massage carriage along the frame, where the other part (32) of the nut (29) can be fastened to the one part (31) from the outside, such that the spindle (30) can be accommodated between the two parts (31, 32).

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13. Massage carriage according to one of Claims 1 to 12, characterized in that the two reduction gears are designed as worm gears.

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